U.S. Serial No. **09/668,788**
Filing Date: **September 22, 2000**

LISTING OF THE CLAIMS

1. (Currently Amended) A process for the production of a ~~glycosyl-~~glucosyl diacylglycerol, a ~~sterolglycoside~~sterolglucoside, a ~~glycocerebroside~~glucocerebroside, an alkyl-β-D-~~glycopyranoside~~glucopyranoside, or a ~~phosphoglycolipid~~ phosphoglucolipid in a cell by the use of a processive lipid ~~glycosyl-~~glucosyl transferase that successively transfers a ~~hexose~~ glucose residue to a lipid acceptor, comprising the steps of:

transferring a nucleic acid molecule that codes for a protein having the enzymatic activity of a processive lipid ~~glycosyl-~~glucosyl transferase to a cell, the protein having an amino acid sequence which is identical to the sequence selected from the sequences in the group consisting of SEQ ID NO:2 and SEQ ID NO:4; and

expressing the protein having the enzymatic activity of a processive lipid ~~glycosyl~~ glucosyl transferase under control of suitable regulatory sequences in the cell to produce a ~~glycosyl-~~glucosyl diacylglycerol, a ~~sterolglycoside~~sterolglucoside, a ~~glycocerebroside~~glucocerebroside, an alkyl-β-D-~~glycopyranoside~~glucopyranoside, or a ~~phosphoglycolipid~~phosphoglucolipid.

2-5 (Cancelled)

6. (Currently Amended) The process according to Claim 1, wherein the ~~glycosyl~~ glucosyl diacylglycerol, the ~~sterolglycoside~~sterolglucoside, the ~~glycocerebroside~~glucocerebroside, the alkyl-β-D-~~glycopyranoside~~glucopyranoside, or the ~~phosphoglycolipid~~ phosphoglucolipid is selected from the group consisting of

monoglucosyldiacylglycerol,
diglucosyldiacylglycerol,
triglucosyldiacylglycerol,
tetraglucosyldiacylglycerol,
glucosyl ceramide,
diglucosyl ceramide,
steryl glucoside,
steryl diglucoside,
glucosyl phosphatidylglycerol, and
diglucosylphosphatidylglycerol.

7-17 (Cancelled)

(3) ~~18.~~ (Previously Presented) The process according to Claim 1, wherein the lipid acceptor is a secondary lipid acceptor, and wherein the secondary lipid acceptor is selected from the group consisting of a monohexosyldiacylglycerolipid, a dihexosyldiacylglycerolipid, a trihexosyldiacylglycerolipid, a tetrahexosyldiacylglycerolipid, a glycocerebroside, a dihexosylcerebroside, a sterolglycoside, a steroldiglycoside and a phosphoglycolipid.

19. (Cancelled)

(4) ~~20.~~ (Previously Presented) The process according to Claim 1, wherein the lipid acceptor is a primary lipid acceptor, and wherein the primary lipid acceptor is diacylglycerol, sterol, phosphatidylglycerol or ceramide.

21-33 (Cancelled)

(5) ~~34.~~ (Previously Presented) The process according to Claim 1, wherein the cell is selected from the group consisting of a plant cell, a yeast cell, and a bacterial cell.

35. (Cancelled)

36. (Cancelled)

(6) ~~37.~~ (Currently Amended) The process according to Claim 1, further comprising recovering the ~~glycosyl~~ glucosyl diacylglycerol, the ~~sterolglycoside~~sterolglucoside, the ~~glycocerebroside~~glucocerebroside, the alkyl-β-D-~~glycopyranoside~~glucopyranoside, or the ~~phosphoglycolipid~~ phosphoglucolipid synthesized by the enzymatic activity of the processive lipid ~~glycosyl~~ glucosyl transferase from the cell.

38-44 (Cancelled)

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SUMMARY OF INTERVIEW

Applicants thank Examiner Rao for the telephone discussion with Applicants' Representative, Marc Morley on Monday, November 24, 2003. The pending claims and proposed amendments to the claims were discussed. It was agreed that Applicants would submit this Supplemental Amendment After Final in order to advance the case to allowance.